

**In the Specification:**

Please amend the specification as shown:

Please delete the paragraph on page 9, line 16 to page 10, line 3 and replace it with the following paragraph:

Figure 3 shows a procedure for a quantification study of a CNBr protein digest using DMG  $^{12}\text{C}_4^{14}\text{N}/^{13}\text{C}_4^{15}\text{N}$  isotope labelling – the protein employed was Bovine Albumin (ALB\_BOVIN) having a molecular weight of 69293 Da, with the following sequence (**SEQ ID NO: 1**):

MKWVTFISLLLLFSSAYSRGVFRDTHKSEIAHRFKDLGEEHFKGLVLIAFSQYLQQCPFDE  
HVKLVNELTEFAKTCVADESHAGCEKSLHTLFGDELCKVASLRETYGDMADCCEKQEPER  
NECFLSHKDDSPDLPKLPDPNTLCDEFKADEKKFWGKYLEIARRHPYFYAPELLYYANK  
YNGVFQECCQAEDKGACLLPKIETMREKVLASSARQRLRCASIQKFGERALKAWSVARLS  
QKFPKAEFVEVTKLVTDLT KVHKECCHGDLLECADDRADLAKYICDNQDTISSKLKECCDKP  
LLEKSHCIAEVEKDAIPENLPPLTADFAEDKDVCKNYQEAKDAFLGSFLYEYSRRHPEYAVS  
VLLRLAKEYEATLEECCA KDDPHACYSTVFDK LKHLVDEPQNLIKQNC DQFEKLGEYGFQN  
ALIVRYTRKVPQVSTPTLVEVSRSLGKVGTRCCTKPESERMPCTEDYLSLILNRLCVLHEKT  
PVSEKVT KCCTESLVNRRPCFSALTPDETYVPKAFDEKLFTFHADICTLPDTEKQIKKQTALV  
ELLKHKPKATEEQLKTVMENFVAFVDKCCAADDKEACFAVEGPKLVVSTQTALA;

Please delete the paragraph on page 10, lines 4-6 and replace it with the following paragraph:

Figure 4 shows a study of elution time for a differentially labelled peptide pair, K\*VPQVSTPTLVEVSR (**SEQ ID NO: 2**), where \* are the stable isotopes DMG  $^{13}\text{C}_4^{15}\text{N}$  (heavy) or DMG  $^{12}\text{C}_4^{14}\text{N}$  (light), highlighting the accurate coelution of the labelled peptide pairs;

Please delete the paragraph on page 10, lines 7-11 and replace it with the following paragraph:

Figure 5 shows quantification using  $^{12}\text{C}/^{13}\text{C}^{15}\text{N}$  DMG labels for the differentially labelled peptide, K\*VPQVSTPTLVEVSR (**SEQ ID NO: 2**), highlighting the effective discrimination of the two isotope patterns due to the 5 amu differential arising from the  $^{12}\text{C}/^{13}\text{C}^{15}\text{N}$  DMG

labels, and also highlighting the effectiveness of the mass difference between the patterns for allowing quantitative analysis; and

Please delete the paragraph on page 10, lines 12-23 and replace it with the following paragraph:

Figure 6 demonstrates the accuracy of the quantitative analysis using  $^{12}\text{C}/^{13}\text{C}_4^{15}\text{N}$  DMG labels; the analysis was performed on 3 peptides having the following labelling characteristics:

- 7 different ratios of DMG  $^{12}\text{C}_4^{14}\text{N}$  and DMG  $^{13}\text{C}_4^{15}\text{N}$  labelling, (1/3; 1/2; 2/3; 1/1; 2/1; 3/2; and 3/1)
- differing numbers of labels
- different size and charge states

as follows:

(DMG)PCTEDYLSLILNR	<u>(SEQ ID NO: 3)</u>	(2+ and 3+)
K(DMG)VPQVSTPTLVEVSR	<u>(SEQ ID NO: 2)</u>	(2+ and 3+)
(DMG)AALK(DMG)AWSVAR	<u>(SEQ ID NO: 4)</u>	(2+ and 3+)

The graph of this Figure plots a regression line for 7 different expected and observed ratios of the above 3 peptides.